

Schedule 1 – 5.1.1 Notification

PART B

Permit Number:	BR9715IB
Name of Operator:	Solutia UK Ltd
Location of Installation:	Corporation Road, Newport, Gwent, NP194XF
Location of the emission:	Therminol Plant – TH3 ‘Crude Polyphenyl’ Storage Tank (T402)
Time and date of the emission:	19/04/2020 at 14:45 – 15:08

Any more accurate information on the matters for notification under Part A	Further to the Part A Notification, the subsequent investigation identified that water had ingressed into the ‘knock-out pot’ system as a result of; a loss of vacuum on the associated ejector unit, and also a possible contribution from the application of steam used to clear blockages As the receiving (T402) storage from this system is above the boiling point of water, this resulted in an increase in pressure to ~790mbarg i.e. above the 500mbarg set point of the conservation vent thereby causing it to open. The estimated quantity of material released as vapour via the vent has been calculated as 28.5kg The system on TH3 is designed to recover materials back into the process, which was a change to the former TH2 operations whereby ‘drumming-off’ for disposal was the standard practice. The consequence of “water ingress” was considered during the Safety/Design stage, but it did not fully appreciate the effect observed on this occasion i.e. the water did indeed ‘boil off’ as steam as expected, but at a higher rate (with entrained biphenyl vapour) and for a prolonged duration
Measures taken, or intended to be taken, to prevent a recurrence of the incident	The following actions were identified as measures to help prevent a recurrence: Transfer to bulk storage prohibited until completion of the actions below, and appropriate safeguards have been put in place Review whether the transfer activity is required. This being the case, to complete RA and put in suitable control measures to confirm no water is present in knock-out pot prior to a transfer being initiated

	• Create troubleshooting & procedural documentation for all activities that have the potential to add water or condensate to the knock-out pot system • Highlight and raise awareness of the consequences associated with water ingress into storages that contain material >100°C
Measures taken, or intended to be taken, to rectify, limit or prevent any pollution of the environment or harm which has been or may be caused by the emission	None proposed
The dates of any unauthorised emissions from the installation in the preceding 24 months	20/04/2020 - Biphenyl Vent [This Notification] 08/10/2019 - PCP in Effluent 18/08/2019 - PCP in Effluent 01/08/2019 - TH3 Pyro Feed 16/07/2019 - TH2 FA vent 24/06/2019 - PCP in effluent 02/11/2019 - PCP in effluent 09/12/2018 - PCP in effluent 21/11/2018 - Gas Turbine Compressor 26/07/2018 - D2010 Bellows failure 11/06/2018 - Benzene, ineffective purge cycle

* Signed:



Date: 14/05/2020

* authorised to sign on behalf of Solutia UK Ltd